

CLAIMS

1. A method of creating a personalized user profile implemented on a computer for searching a database comprising:

5 (a) displaying to the user an index of choices representing content items stored in the database, wherein each choice of the index is associated with a set of related keywords representing categories for the content items stored in the database;

10 (b) establishing a personal profile for the user comprising keywords compiled from selections made by the user from the displayed index and entered as user input on the computer;

15 (c) receiving a first user input of a selection of a choice from the displayed index, and retrieving the associated keywords related to the selected choice in order to generate a set of search phrases using the associated keywords;

20 (d) conducting a search of the database using the set of search phrases as search queries to the database, and returning one or more objects from the database in response to the search queries;

25 (e) displaying to the user a new index of choices representing the objects returned from the database, wherein each choice on the displayed index is associated with the keywords used in the search phrase that returned the object represented;

30 (f) receiving a subsequent user input of a selection of a choice from the displayed index, and updating the user's personal profile with the keywords used in the search phrase that returned the selected object;

(g) retrieving associated keywords related to the keywords used in the search phrase that returned the selected object in order to generate a subsequent set of search phrases using the associated keywords;

(h) conducting a subsequent search of the database using the subsequent set of search phrases as further search queries to the database, and returning one or more objects from the database in response to the search queries;

(i) displaying to the user a new index of choices representing the objects returned from the database, wherein each choice on the displayed index is associated with the keywords used in the search phrase that returned the object represented; and

(j) iteratively continuing the cycle of user input by selection from the displayed index of choices, updating the user's personal profile with keywords used in the search phrase that returned the object selected by the user, using associated keywords related to the selected keywords to generate a subsequent set of search

5 phrases, and conducting a further search of the database with the subsequent set of search phrases, thereby enhancing the depth of the personal profile and allowing it to be used to uniquely characterize the particular interests of the user in computerized applications that are to be personalized to the user.

10 2. A method according to Claim 1, wherein the method is implemented on a computer connected to a network, and the network is a repository of a large or distributed database of information.

3. A method according to Claim 2, wherein the network is the World Wide

15 Web having multitude of websites storing a distributed database of information, and the user uses a standard browser as an interface on the computer to the World Wide Web.

20 4. A method according to Claim 1, wherein the personal profile for the user is a Personal Word Map comprising keywords compiled from selections made by the user from the displayed index.

25 5. A method according to Claim 3, wherein to initiate a session by the user to visit a website on the World Wide Web, a Site Navigation Map containing choices of objects representing categories of content items stored on the website is displayed as an initial index to the user.

30 6. A method according to Claim 5, wherein the Site Navigation Map is included in a Site Word Map containing lists of default keywords associated with each choice displayed to the user.

35 7. A method according to Claim 4, wherein to initiate a session on the computer by the user, a previous Personalized Word Map stored on the computer is retrieved, or, if there is no stored personal word map, a default (initial) word map is retrieved.

8. A method according to Claim 4, wherein two associated keywords from a list of associated keywords related to a choice selected by the user are used to generate each search phrase, and the two associated keywords used in the search

5 phrase that returned an object selected by the user are added to the user's Personalized Word Map.

9. A method according to Claim 8, wherein the two associated keywords are each added to the Personalized Word Map as a keyword and its complementary

10 keyword is added as an associated word.

10. A method according to Claim 9, wherein each keyword and associated word includes a weight value representing the number of times that word has been used in a search phrase in association with its associated word, and if a word is a

15 keyword used in a subsequent search phrase that returned an object selected by the user and is already listed as a keyword on the Personalized Word Map, the weight value of the keyword is incremented by one, and the weight value of its associated word is incremented by one if already associated or the associated word is added if not already associated.

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11. A method according to Claim 1, further comprising prior to displaying a new index of objects returned from search queries to the database, the step of selecting and filtering objects to be included in the display according to predetermined parameters.

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12. A method according to Claim 11, further comprising the step of publishing and influencing the selection of objects to be presented in the display according to predetermined parameters.

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13. A method according to Claim 12, wherein the step of influencing the selection of objects to be presented in the display includes selecting those objects whose search phrases include a keyword that matches a keyword already listed on the Personalized Word Map.

14. A method according to Claim 5, wherein the personal profile for the user is used to identify the user's preferences for items of interest on a website visited by the user.

5 15. A method according to Claim 14, wherein the personal profile for the user is used at the transaction layer of a website.

10 16. A method according to Claim 14, wherein the personal profile for the user is used to display items retrieved from the database of the website that match the preferences of the user.

15 17. A method according to Claim 1, wherein the personal profile for the user is used for a database application involving one of the group consisting of: Cultural Pattern Recognition; Geographic Trend Analysis; Demographic Visualization; Behavioral Characterization of Markets; and Language and Culture Migration.

18. A method for creating a personal profile of a user implemented on a computer for searching a database comprising the following steps:

- (a) words or words linked to graphical elements are presented as choices to a user in a display;
- (b) each word is associated with other keywords or default words;
- (c) if a profile of the user has previously been established, the profile is referenced for previous added keywords or associative words;
- (d) search phrases are made from selected keywords or associative words added to the profile;
- (e) the search phrases are sent as search queries to search for objects in the database;
- (f) the objects returned from the search are presented to the user as a new display of choices;
- (g) when a user selects an object, the words that were used to search for that object are added to the user's profile, or reinforced if already present;
- (h) the steps (d) to (g) above are repeated iteratively.